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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,876	04/19/2005	Shirou Asada	270499US0PCT	4538
22850	7590	01/15/2008	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.			EDWARDS, NEWTON O	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			01/15/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
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**Office Action Summary**

Application No.

10/531,876

Applicant(s)

ASADA ET AL.

Examiner

N Edwards

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 6-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 4/19/05, 12/10/07.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. Applicant's election without traverse of group I, claims 1-5 in the reply filed on 12/10/07 is acknowledged. The Lack of Unity is hereby made Final.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Asada (US 5,104,718).

Asada, a **Mitsubishi Rayon** patent, teaches a UD prepreg (fiber reinforced sheet impregnated with a matrix resin) comprising a continuous resin layer (prepreg) with grooves (inside thereof and fiber part) having a top and bottom surface, Asada further teaches at least one of the surface is impregnated with a matrix resin or thermosetting resin (yielding a resin impregnated part) while the grooves or fiber part is substantially free of matrix resin. See Fig 1a structure and Fig 1 B, for example. Note the Fig 1a and 1b shown the sea and island structure of claim 2 with the grooves and raised portions. Asada still further an embossing paper (protective film) having irregular surface is applied to at least one side of the prepreg to make the grooves (islands with a center distance between adjacent islands is about 2.0mm to 2.5 mm. See fig 5,fig 9, col.4 lines 24-35,col.3lines 25-67,claims 1,col.1lines 5-15, and example 1.

4. Claims 1, 2, 3, and 5 are rejected under 35 U.S.C. 102(B) as being clearly anticipated by JP1-200914.

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JP1-200914 is applied for the same reasons given in the search report of provide  
4/19/05 and the abstract which is both here by incorporated by reference.

5. - Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being clearly anticipated  
by Calhoun (US 5,589,246).

Calhoun teaches sheets (pregreg) having a continuous resin layer which include  
recessed surface impregnated with adhesive layer (matrix resin) and a raised surface  
with no adhesive layer (matrix resin). Note the raised and recessed surface define the  
sea-island structure of claim 2 in Fig 1, 3, and 4, for example.

Any inquiry concerning this communication should be directed to Primary  
Examiner Edwards at telephone number 571-272-1521.

  
N Edwards  
Primary Examiner  
Art Unit 1794